BORANG PENGESAHAN STATUS TESIS

JUDUL: **Biotechnology Info Kiosk**

SESI PENGAJIAN: **2006/2007**

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BIOTECHNOLOGY INFO KIOSK

SITI NOR MAZIAN BINTI EMBRAN

This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Database Management)

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2006

DECLARATION

I hereby declare that this project report entitled

BIOTECHNOLOGY INFO KIOSK

Is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT : _____ DATE: 20/11/06
(SITI NOR MAZIAN EMBRAN)

SUPERVISOR : _____ DATE: 20/11/06
(EN. YAHAYA ABD. RAHIM)

DEDICATION

"To my beloved parents, family, KUTKM lecture and all my friends"

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ABSTRACT

Generally, many of Biotechnology Information/Info Kiosk now doesn't have database include kiosk in Pusat Sains Negara (PSN), and because of this search info had problem. Therefore this research was carried out to overcome that problem. Hence, Biotechnology Info Kiosk for PSN has to develop for overcome this problem. This Info kiosk is the one application for give free information to user/visitor of PSN. The goal of this project is to develop info kiosk which is give permission to user to search information in database for improve times regarding searching process. These info kiosks have many benefits to user, such as search engine, buy books and others. The prototyping method used on developing the project as it is an essential element of an iterative design approach, where designs are created, evaluated, and refined with the results of testing at each cycle feeding into the design focus of the next cycle. The System Development Life Cycle (SDLC) and Database Life Cycle (DBLC) have been chosen as project methodology because its deliverables of every stage matches the project milestone requirement. The Biotechnology Info Kiosk project development is grouped into five major phases: Planning, Analysis, Design and Implementation. This info kiosk will improve information presentation style from static to dynamic (with database) content, user friendly and reduce time to find specific information.

ABSTRAK

Secara umumnya, kebanyakkan gerai maklumat (*Information/Info Kiosk*) biotechnologi termasuk di Pusat Sains Negara (PSN) sekarang tidak mempunyai pangkalan data dan kerana itu pencarian maklumat bermasalah. Oleh itu, kajian ini dijalankan untuk mencari satu penyelesaian bagi masalah tersebut. Maka, *Biotechnology Info Kiosk* untuk PSN telah dibangunkan untuk menyelesaikan masalah ini. Gerai maklumat ini merupakan salah satu aplikasi bagi memberi maklumat percuma kepada pengguna. Tujuan projek ini ialah untuk membangunkan gerai maklumat yang membenarkan pengguna melakukan pencarian didalam pangkalan data untuk mempercepatkan proses pencarian. Gerai maklumat ini mempunyai banyak kegunaan pada pengguna seperti engin pencarian, pembelian buku dan sebagainya. Kaedah prototaip digunakan dalam membangunkan projek ini dimana kaedah ini merupakan elemen asas dalam rekabentuk interatif initu merekabentuk, menilai dan menapiskan keputusan setiap fasa pengujian ke dalam rekabentuk yang memfokuskan fasa berikutnya. *System Development Life Cycle* (SDLC) dan *Database Life Cycle* (DBLC) dipilih sebagai methodologi project kerana penyampaian setiap peringkatnya berpadanan dengan kehendak projek. Pembangunan projek gerai maklumat dikategorikan kepada 5 bahagian fasa yang utama iaitu perancangan, analisis, rekabentuk, perlaksanaan dan implikasi. Gerai maklumat ini akan meningkatkan cara penyampaian maklumat dari kandungan statik ke dinamik (ada pangkalan data), mesra pengguna dan kurangkan masa untuk mencari maklumat yang spesifik.

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LIST OF ABBREVIATION

ABBREVIATION		MEANING
Info Kiosk	-	Information Kiosk
KUTKM	-	Kolej Universiti Teknikal Kebangsaan Malaysia
PSM	-	Projek Sarjana Muda
PSN	-	Pusat Sains Negara
SDLC	-	System Development Life Cycle
DBLC	-	Database Life Cycle
NF	-	Normal Form
BCNF	-	Boyce-Cold Normal Form
ER	-	Entity Relationship
PHP	-	Personal Homepages Hypertext Preprocessor
RDBMS	-	Relational Database Management System

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CHAPTER I

INTRODUCTION

1.1 PROJECT BACKGROUND

This info kiosk (Figure 1) is to provide free information of a series of articles in Kiosk. For this Biotechnology Info Kiosk same like other kiosk is to provide information (in text and graphic). Information of this kiosk is about biotechnology and its applications in humans, plants, and animals to people who want to know more about biotechnology (biotechnology services, product and book report). This info kiosk will have two category-kiosks (child and adult), two sub-kiosks (guided and unguided) and also user can buy biotechnology book thru this kiosk. Biotechnology info kiosk will use MySQL(database) and PHP (interface). Using this kiosk user can used search engine to find information in database without reading all information.

The term biotechnology has quickly become part of the American vocabulary and it is thrown around as if everyone knows what it means. But many of us have a hazy understanding of this word and associate terms like genomics, DNA, chromosome, and even the seemingly simple word, cell. Biotechnology is a burgeoning field of study

that, no matter what our individual feelings on the subject, is an undeniable part of modern life and a serious focus of University research. This info kiosk provide to Pusat Sains Negara (PSN), the old Biotechnology Info Kiosk for PSN just use Director MX and Flash only and doesn't have database so for Projek Sarjana Muda (PSM) this info kiosk will be improve from static content to dynamic content. As the result of making this Info Kiosk can give many advantages to all users especially for PSN visitor (they can just using search engine to find what they want).

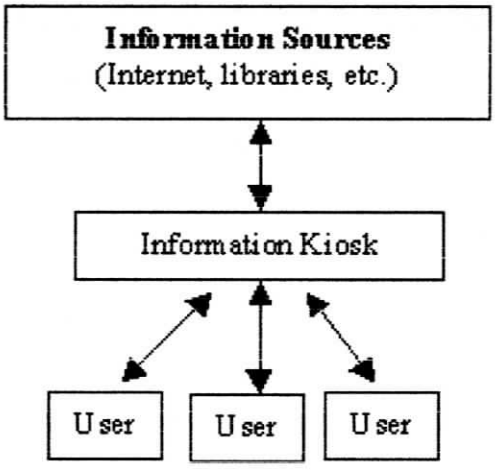

Figure 1.1: Information Kiosk Model

1.2 PROBLEM STATEMENTS

In this technology era, we know that now when people want to know something they just go access internet and browse it. They don't like to open the book because it's can be wasting time to find the subject in that book.

Problem when reading a bigger book:

- Wasting time to find information that we want in the book

- To many information, so people can't remember it

Because of that we making kiosk (but doesn't have database). After doing static content for info kiosk, we found out there are some problems using static content which is user can find what they want easily, admin have problem to update data (with this admin just update one data and data in different location can update too-same data). There are also problems when making static content its have many text must insert (also retype same information) to that pages but for dynamic content just call in the database. The one command problem is kiosk for children and adult is in different level of information so that this kiosk must in two version (child and adult).

1.3 OBJECTIVE

Objectives of developing this Biotechnology Info Kiosk follow several outlines such as:

i. Improve overall static content to dynamic content info kiosk and provide interesting about biotechnology.

ii. Ease to use
The system should be easy to use and user friendly for children and adult, also the information is easy to understand.

iii. Decrease time for find specific information
Easy to find information just used search engine (using database) without reading all content of information.

iv. Developing Information Kiosk more efficient and accurate

1.4 SCOPES

The kiosk that will be developed of Projek Sarjana Muda (PSM) will provide a better and more interesting way in gain knowledge/ learning about Biotechnology. User of this system is all visitor of Pusat Sains Negara (PSN) that is using info kiosk provided by PSN. With this info kiosk, visitors can reduce the time spend learning about this topic (biotechnology) as the visitors will grasp the information of biotechnology more quickly with the help of visualization. Visitor/user just can see information, give feedback and print information they want. This system is accessed just in PSN-standalone system.

The information kiosk used to:

- Produce guided and unguided tour info
- Produce search engine (user can find information using database)
- Produce two sub-biotechnology info kiosks (Children & Adult)
- Gathering feedback and suggestion from user
- Give user to print information they want.
- Produce biotechnology service, product and book report
- Produce movement graphic and interactive kiosk
- Produce kiosk that users can buy books.

There are two site that are user site and administration site. User site is for user to view information and make search for application system. Admin site is for person that given the authorization to use the module inside the system that is insert data, update data, delete data, search data and save data.

1.5 PROJECT SIGNIFICANCE

Biotechnology Info Kiosk is important and give many advantages and benefit for Pusat Sains Negara (PSN) especially visitor. This information kiosk can facilitate and quicken process to understanding biotechnology because information that provide is easier to understand (using short form, easy word and easier graphic/picture). This information kiosk can decrease time for find specific information because people can easy to find information just used search engine without reading all content of information.

This Biotechnology Info Kiosk can be one of user friendly information kiosk because it's providing two category of information stage (child and adult stages). Children environment more childish, attractive and easy word for they understanding, for adult environment its have formal format and more hardest word (many of children can't understand). For first time visit this information kiosk they can pick guided tour exploration to understand overall what information about.

Buy books service provided also, where user can easier to find the best biotechnology books without find it at shops. This info kiosk also provides report about biotechnology service, product and book which is can print and visitor can give their feedback and suggestion for this information kiosk. With developing this kiosk, PSN admin can update information for this kiosk easily.

1.6 EXPECTED OUTPUT

Features and function that will be offer from Biotechnology Info Kiosk is for visitor/user they can make learning/gain knowledge process of any information about biotechnology that they want to know and also they can see the new updated report of biotechnology product, book and services. For administrator site, admin can make search, insert, update, delete and save function/information.

The main expected outputs of Biotechnology Info Kiosk for Pusat Sains Negara (PSN) are:

- User friendly information kiosk.
- Have two sub-categories (adult and child) and two sub-exploration (guided and unguided tour).
- Admin can add, delete, insert or modify data filed in all screen
- Visitor / user can print information they want with this kiosk (e.g. biotechnology book, firm and product report).
- Gain visitor feedback and suggestion about this kiosk.

1.7 CONCLUSION

Biotechnology Info kiosk is to provide free information of a series of articles in Kiosk. Biotechnology Info Kiosk is important and give many advantages and benefit for Pusat Sains Negara (PSN) especially visitor. This information kiosk can facilitate and quicken process to understanding biotechnology because information that provide is easier to understand (using short form, easy word and easier graphic/picture). This

Biotechnology Info Kiosk can be one of user friendly information kiosk because it's providing two category of information stage (child and adult stages). For the next chapter its will discuss about literature review and project methodology.